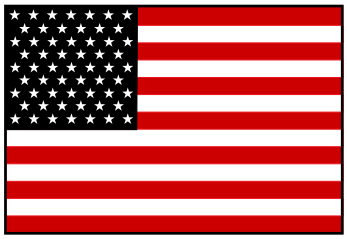
U.S. Department
of Transportation
**Federal Aviation
Administration**

AFS-600
Regulatory Support Division

ADVISORY CIRCULAR
43–16A

AVIATION MAINTENANCE ALERTS



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CONTENTS

SERVICE ALERT

RAPCO, INC. 1

AIRPLANES

BEECH 1
CESSNA 2
GULFSTREAM 3
PIPER 3
SABRELINER 4
TIGER 4

HELICOPTERS

McDONNELL DOUGLAS 6

AIR NOTES

ELECTRONIC VERSION OF MALFUNCTION OR DEFECT REPORT 6
SERVICE DIFFICULTY REPORTING PROGRAM 7
IF YOU WANT TO CONTACT US 8
AVIATION SERVICE DIFFICULTY REPORTS 8

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION
WASHINGTON, DC 20590

AVIATION MAINTENANCE ALERTS

The Aviation Maintenance Alerts provide a common communication channel through which the aviation community can economically interchange service experience and thereby cooperate in the improvement of aeronautical product durability, reliability, and safety. This publication is prepared from information submitted by those who operate and maintain civil aeronautical products. The contents include items that have been reported as significant, but which have not been evaluated fully by the time the material went to press. As additional facts such as cause and corrective action are identified, the data will be published in subsequent issues of the Alerts. This procedure gives Alerts' readers prompt notice of conditions reported via Malfunction or Defect Reports. Your comments and suggestions for improvement are always welcome. Send to: FAA; ATTN: Aviation Data Systems Branch (AFS-620); P.O. Box 25082; Oklahoma City, OK 73125-5029.

SERVICE ALERT

RAPCO, INC.

Replacement Aircraft Part Company (RAPCO, Inc.) Service Alert (RASA-1003) Wing Deice and Propeller Boot Repair

RAPCO, Inc is in the process of developing a new form of the product called "Bootsaver."

RAPCO Service Alert RASA-1003 recommends, effective immediately, that you remove all RA-200-WA or RA-201-PB "Bootsaver" from existing inventory. RA-200-WB and RA-201-PB are no longer to be used as a repair of deicers on any aircraft.

Please advise your customers and aircraft owners that RA-200-WA and RA-201-PB has been discontinued. RAPCO, Inc. is in the process of producing a new "Bootsaver" that will incorporate an FAA-Approved Standard Repair for the repair of the deicers.

AIRPLANES

BEECH

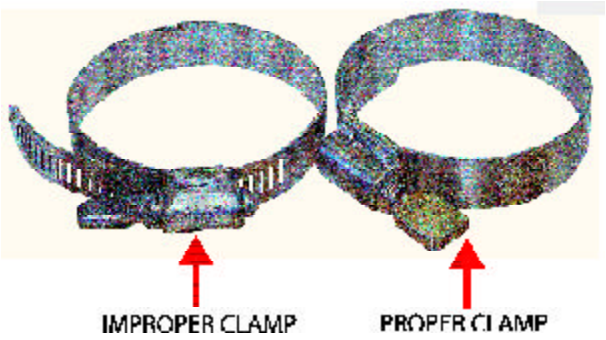
Beech; Model B36TC; Bonanza; Improper Clamp Installation Causes Landing Gear Failure; ATA 2120

The owner reported he was unable to achieve gear down and locked on approach for landing. He extended the landing gear manually and landed the aircraft without incident.

The technicians conducted a postflight inspection, which revealed a heat duct clamp (P/N AN737TW74-91) located under the copilot seat had been installed in place of the correct clamp (P/N AN737TW56-66). (Refer to the illustration). The larger clamp was tightened and created

a “pig-tail” which caught on the right inboard of the landing gear door rod/bellcrank assembly and forced it off of the duct and onto the landing gear relay (P/N SM 50D7). The clamp shorted the gear relay and rendered the landing gear inoperative in normal mode.

Part total time unknown.



Beech; Model C90; King Air; Electrical Terminal Block Failure; ATA 3197

The pilot reported that smoke was coming into the cabin from the copilot’s instrument panel.

The technician discovered that the primary wires to the belly terminal block (P/N MS27212-5-5) below the center pedestal were loose. The securing nut on the block had backed off and caused the wires to get hot and burn the insulation. He replaced the terminal block and the four wires. Two of the wires went to the number 1 buss and two wires went to the “max heat” 150-amp circuit breaker at the pilot’s feet.

Part total time unknown.

CESSNA

Cessna; Model 310P; Nose Landing Gear Bellcrank Failure; ATA 3230

During a scheduled training flight, the pilot placed the landing gear selector in the up-and-locked position. He heard a loud pop/bang, and there was no “up-and-locked” indication for the nose landing gear. However the main landing gear did reveal an “up-and-locked” indication. He recycled the landing gear with same results and landed the aircraft without the use of the nose gear.

The technician discovered the broken bellcrank idler (P/N 0842102-2) was causing the nose gear to be disconnected from the gearbox.

The FAA Service Difficulty Reporting Program data base revealed 17 reports of similar failures.

Part total time-5, 499 hours.

Cessna; Model 402C; Businessliner; Avionics Master Switch Failure; ATA 2460

During climbout, the pilot smelled smoke in the cockpit area. An investigation revealed the smoke was coming from the avionics master switch (P/N CM3589-50). He notified the tower before shutting down the avionics master switch.

The submitter stated the same problem was found on two additional aircraft in their fleet. The FAA Service Difficulty Reporting Program data base revealed 29 reports of avionics master switch (P/N CM3589-50) failures.

Part total time-814 hours.

GULFSTREAM

Gulfstream; Model G-V; Aileron Counterweight Separation; ATA 5751

On descent for landing with two passengers onboard, the pilot experienced difficulty in turning the aircraft laterally to the right. He was able to control the aircraft and made a normal landing.

According to the technician, the aileron mass balance weight (P/N 1159CSM55106-27) had become unattached (loss of attaching hardware). This allowed the tungsten block to slide forward against the wing rear beam and restricted the aileron downward movement.

The submitter believes that loose and missing hardware caused this problem. One screw and two nuts were found resting on the lower rear wing beam.

Part total time-481 hours.

PIPER

Piper; Model PA28-236; Dakota; Restriction Fuel Selector Cover; ATA 2510

The submitter stated that the fuel selector cover (98635-09) is currently secured with three MS24693-39 No. 6 100-degree countersink screws and three FCW6 interior finishing cup washers.

According to the submitter, the selector handle will actually chafe across the cup washer when the selector is placed in the left tank position. He feels that it is possible that the handle may become restricted and not allow maximum fuel flow from the left tank.

The submitter suggests replacing the cup washer with DW06SS or an equivalent countersunk washer. This will allow for greater clearance between the cover and the bottom of the selector handle.

Part total time unknown.

Piper; Model PA 34-200T; Seneca II; Nose Gear Steering Assembly Failure; ATA 3250

After takeoff, the pilot heard a strange noise coming from the nose gear area and noticed the nose gear did not fully retract. After several attempts to lower and raise the landing gear, he elected to land the aircraft knowing that the nose gear was not fully extended.

The technician discovered the tiller ball (P/N 95387-00) had come out of the steering track assembly and locked up on the side of the track (P/N 95759-07).

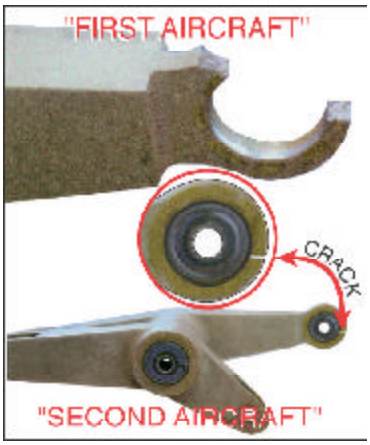
Part total time-11, 141 hours.

SABRELINER

Sabreliner; Model NA-265-65; Sabre 65; Broken Elevator Bellcrank; ATA 2730

During routine maintenance, the technician was installing flight controls on a Sabreliner NA-265-65. While working in the empennage, he leaned against the flight control cable and the left lower bearing boss area on the elevator bellcrank (P/N 265-522131-3) broke. (Refer to the illustration.)

After finding the left aft elevator bellcrank cracked at the lower bearing boss area, the technician decided to perform an inspection on the five additional Sabreliner NA-265-65 aircraft that were located at the facility. The inspection revealed one additional cracked bellcrank at the same location.



The submitter recommends that the operators perform a close visual or eddy-current inspection of the lower bearing boss. At this time, the cause of the failures has not been determined. The weakened boss area could have resulted from the combination of high cable tension, bias loading of the elevator cables, and line staking the bearing boss area during manufacture.

Part total time-3,840 hours.

TIGER

Tiger Aircraft LLC; Models AA-5, AA-5A, AA-5B, and AG-5B; Spinner Aft Bulkhead; ATA 6110

The following article was submitted by the New York ACO ANE-171, located in Valley Stream, New York. The Engine Directorate, the NTSB, and the OEM reviewed and accepted this article. *(The article is printed as it was received.)*

> A Tiger Aircraft AA-5B had an in-flight separation of its propeller and was forced to make an emergency landing. During cruise flight, the pilot noticed a vibration. The vibration continued to increase, and subsequently, the propeller assembly departed the aircraft engine.

An investigation determined that four of the six mounting holes of the aft spinner bulkhead had a crescent-shaped sheared-off arc area that made the holes appear elongated. Further analysis revealed that this was caused by the aft spinner bulkhead being pinched between the propeller spacer and the crankshaft flange bushings. It was determined that this condition was the result of aft spinner bulkhead misalignment during the installation process. During installation of the propeller, the aft spinner bulkhead slipped-off of the crankshaft flange bushings and rested against the propeller bolts. Once the bolts were torqued in the misaligned condition, the result was the aft spinner bulkhead wedged between the propeller spacer and the crankshaft flange bushings. Eventually the spinner bulkhead wore through creating crescent-shaped sheared-off arc areas, and the propeller became loose.

The propeller installation section of the Tiger Aircraft AA-5 series and AG-5B Aircraft Maintenance Manual (AMM) includes a 'CAUTION' statement, which warns that the aft spinner bulkhead can be damaged if not held securely in place during propeller installation. A temporary means of securing the aft spinner bulkhead, to insure that it is seated properly onto the crankshaft flange bushings, is recommended by the AMM. It is recommended that maintenance personnel familiarize themselves with the propeller installation procedure, as defined in the AMM, and abide by the 'CAUTION' statements. Furthermore, it is recommended that inspectors performing annual/100-hour inspections (during which access to the subject area is available for scheduled maintenance tasks) visually inspect the aft spinner bulkhead to starter ring gear mating to insure even fit around the mating surface (see Figures 1 and 2). The spinner to propeller fit and clearance can also provide an indication of a misaligned aft spinner bulkhead (see Figures 3 and 4).

While the subject incident occurred on a Tiger Aircraft AA-5B aircraft, this alert is valid for Tiger Aircraft models listed above because of the similarity in propeller assembly and parts.

Part total time is not applicable.

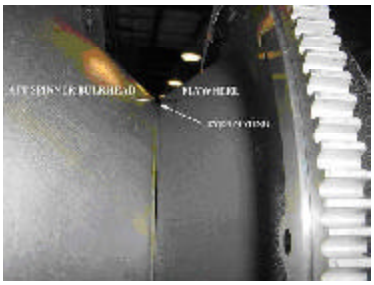


Figure 1. Correct Installation.

Figure 2. Incorrect Installation.

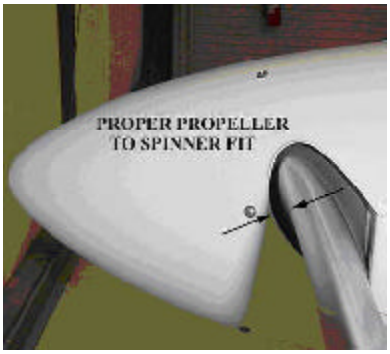


Figure 3. Correct Propeller - Spinner Fit.

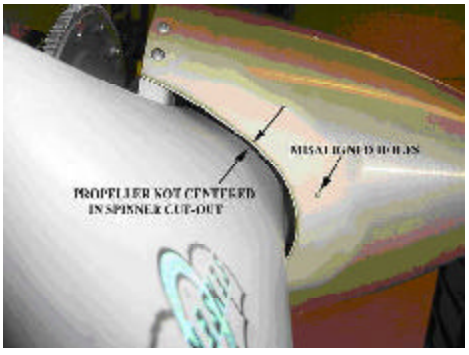


Figure 4. Incorrect Propeller - Spinner Fit.

HELICOPTERS

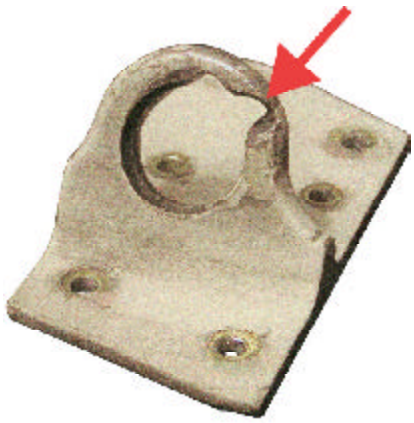
McDONNELL DOUGLAS

McDonnell Douglas; Model 369D; Worn Shoulder Harness Attach Fitting; ATA 2510

During a conformity inspection on a leased aircraft, the rear seat shoulder harness attach fittings (P/N 369H3025-1 LH and –2 RH) were found to have an excessive amount of wear on the inside of the "ring" attach fitting. (Refer to the illustration.)

According to the submitter, the right hand fitting had approximately 70 to 80 percent of the ring chafed through, and the left hand fitting had about 15 percent of the ring chafed through.

Part total time-11, 597.



AIR NOTES

ELECTRONIC VERSION OF MALFUNCTION OR DEFECT REPORT

One of the recent improvements to the Flight Standards Service Aviation Information Internet web site is the inclusion of FAA Form 8010-4, Malfunction or Defect Report. This web site is still under construction and further changes will be made; however, the site is now active, usable, and contains a great deal of information.

Various electronic versions of this form have been used in the past; however, this new electronic version is more user friendly and replaces all other versions. You can complete the form online and submit the information electronically. The form is used for all aircraft except certificated air carriers who are provided a different electronic form. The Internet address is:

http://av-info.faa.gov/isdr/

When the page opens, select "M or D Submission Form" and, when complete, use the "Add Service Difficulty Report" button at the top left to send the form. Many of you have inquired about this service. It is now available, and we encourage everyone to use this format when submitting aviation, service-related information.

SERVICE DIFFICULTY REPORTING PROGRAM

The objective of the Service Difficulty Reporting (SDR) Program is to achieve prompt and appropriate correction of conditions adversely affecting continued airworthiness of aeronautical products fleet wide. The SDR program is an exchange of information and a method of communication between the FAA and the aviation community concerning inservice problems.

A report should be filed whenever a system, component, or part of an aircraft, powerplant, propeller, or appliance fails to function in a normal or usual manner. In addition, if a system, component, or part of an aircraft, powerplant, propeller, or appliance has a flaw or imperfection which impairs, or which may impair its future function, it is considered defective and should be reported under the program.

These reports are known by a variety of names: Service Difficulty Reports (SDR), Malfunction or Defect Reports (M or D) and Maintenance Difficulty Reports (MDR).

The collection, collation, analysis of data, and the rapid dissemination of mechanical discrepancies, alerts, and trend information to the appropriate segments of the FAA and the aviation community provides an effective and economical method of ensuring future aviation safety.

The FAA analyzes SDR data for safety implications and reviews the data to identify possible trends that may not be apparent regionally or to individual operators. As a result of this review, the FAA may disseminate safety information to a particular section of the aviation community. The FAA also may adopt new regulations or issue airworthiness directives (AD's) to address a specific problem.

The primary source of SDR's are certificate holders operating under Parts 121, 125, 135, 145 of the Federal Aviation Regulations, and the general aviation community which voluntarily submit records. FAA Aviation Safety Inspectors may also report service difficulty information when they conduct routine aircraft and maintenance surveillance as well as accident and incident investigations.

The SDR data base contains records dating back to 1974. Reports may be submitted on the Internet through an active data entry form or on hard copy. The electronic data entry form is in the Flight Standards Aviation web site. The URL is: <http://av-info.faa.gov>.

A public search/query tool is also available on this same web site. This tool has provisions for printing reports or downloading data.

At the current time we are receiving approximately 45,000 records per year.

Point of contact is:
John Jackson
Service Difficulty Reporting System Program Manager
Aviation Data Systems Branch, AFS-620
P.O. Box 25082
Oklahoma City, OK 73125

Telephone: (405) 954-6486
E-Mail address: 9-AMC-SDR-ProgMgr@faa.gov

IF YOU WANT TO CONTACT US

We welcome your comments, suggestions, and questions. You may use any of the following means of communication to submit reports concerning aviation-related occurrences.

Editor: Isaac Williams (405) 954-6488
FAX: (405) 954-4570 or (405) 954-4655

Mailing address: FAA, ATTN: AFS-620 ALERTS, P.O. Box 25082,
Oklahoma City, OK 73125-5029

You can access current and back issues of this publication from the internet at:
<http://av-info.faa.gov>. Select the General Aviation Airworthiness Alerts heading.

AVIATION SERVICE DIFFICULTY REPORTS

The following are abbreviated reports submitted between June 25, 2003, and July 22, 2003, which have been entered into the FAA Service Difficulty Reporting (SDR) System data base. This is not an all inclusive listing of Service Difficulty Reports. For more information, contact the FAA, Regulatory Support Division, Aviation Data Systems Branch, AFS-620, located in Oklahoma City, Oklahoma. The mailing address is:

FAA
Aviation Data Systems Branch, AFS-620
PO Box 25082
Oklahoma City, OK 73125

These reports contain raw data that has not been edited. If you require further detail please contact AFS-620 at the address above.

FEDERAL AVIATION ADMINISTRATION
Service Difficulty Report Data

Sorted by Aircraft Make and Model then Engine Make and Model. This Report Derives from Unverified Information Submitted By the Aviation Community without FAA review for Accuracy.

ACFT MAKE	ENG MAKE	COMP MAKE	PART NAME	PART CONDITION	DIFF-DATE	T TIME
ACFT MODEL	ENG MODEL	COMP MODEL	PART NUMBER	PART LOCATION	OPER CTRL NO.	TSO
REMARKS						
	PWA	INSERT		BLEW OUT	05/28/2003	
	CA3	519589		ENGINE CADE		

(CAN) IN FLIGHT, NOSE CASE PLUG INSERT BLEW OUT PUMPING ENGINE OIL OVERBOARD. ENGINE WAS SMOKING AND OIL STREAMING NECCESSITATED ENGINE SHUT DOWN, PROP FEATHER, AND AIRCRAFT RETURNING TO AIRPORT. NOSE CASE REPLACED WITH A SERVICEABLE UNIT.

	PWA	FLOW DIVIDER		WRONG PART	05/27/2003
	PT6A42	3036640		ENGINE	

(CAN) ENG WAS SHUT OFF IN FLIGHT FOLLOWING HIGHT-5 OCCURRENCE. NO DAMAGE EXTERNALLY AND ONLY DAMAGE FOUND INTERNALLY WAS RUBBING CONTACT BETWEEN COMP TURBINE BLADE TIPS & CT SHROUD SEG. NO EVIDENCE OF OVERTEMP, OR ANY BUILD ERRORS IN THEE ENG. FLOW DIVIDER HAS WRONGLY IDENTIFIED BODY INSTALLED, THIS ERROR HAS CAUSED DIFFICULTIES IN STARTING AND IN FLIGHT INCIDENT. IN-FLIGHT PROBLEMS OF THIS ENG WERE CAUSED BY FLOW DIVIDER. WRONG BODY BEING INSTALLED ALLOWED OUTLET TO POUR A LOT OF FUEL THROUGH IT. ENG WAS POURING FUEL OUT OF THE FLOW DIVIDER, MADE ENG RUN VERY LEAN IN FUEL AND WAS NOT ABLE TO PRODUCE ENOUGH ENERGY TO PROPERLY ACCELERATE DURING THE START CYCLE, LEADING TO ELEVATED

	PWA	ENGINE	FAILED	06/24/2003	15655
	PT6A67D				

(CAN) RUBBING SOUNDS COMING FROM POWER TURBINE AREA CAUSED BY CONTACT BETWEEN FACE OF 2ND STAGE POWER TURBINE DISK, SEAL & COVER OF PT SHAFT HOUSING ASSY. CONTACT AROSE BECAUSE TEE HEAD LUGS SECURING SEAL & COVER TO PT SHAFT HOUSING FRETTEDD THROUGH FLANGE RELEASING SEAL AND COVER, ALLOWING SEAL TO MOVE REARWARDS & CONTACT FACE OF PT 2 DISK. ALL OF SLOTS IN PT SHAFT HOUSING ASSY HAVE HEAVY FRETTING WEAR, EITHER COMPLETELY THROUGH OR ALMOST COMPLETELY THROUGH FLANGE. THIS MEANS THAT 4 RIVETS WHICH BROKE, RELEASING TEE HEADED LUGS, FAILED TOWARDS END OF PROCESS. RIVET FAILURE WAS A RESULT OF WEAR & FRETTING & WAS NOT CAUSE OF IT.

AMD	PUSHROD TUBE		CHAFED	06/26/2003	8168
FALCON	F10A272129		ELEVATOR		

DURING INSPECTION FOR HYDRAULIC SEEP AT BOTTOM OF RUDDER, FOUND ELEVATOR SERVO PRESSURE LINE CHAFFED THROUGH RUDDER PUSH-PULL TUBE. SUSPECTED LINE WAS TIGHTENED WITH A PRELOAD THAT TWISTED THE LINE TO CHAFE ON THE RUDDER PUSH-PULL TUBE. TTHE LINE WAS LOOSENED AND REPOSITIONED ITSELF SO AS TO EXTEND AND RETRACT WITH CONTROL MOVEMENT WITHOUT INTERFERENCE WITH THE RUDDER PUSH-PULL TUBE. THE PUSH-PULL TUBE HAD A HOLE CHAFED THROUGH AND REQUIRED REPLACEMENT. THIS AREA IS ONLY INSPECTED DURING A 3B (3600 HOURS) OR C (6 YEARS) IAW THE MFG MM, CHAPTER 5-10-00.

BAC	LYC	PRESSURE	CRACKED	05/21/2003	37153
146200	ALF502R5	FUSELAGE	37153		

(CAN) DURING COMPANY SPECIAL FLEET INSPECTION 13 INCH CRACK DISCOVERED IN THE WHEEL WELL UPPER PRESSURE SKIN ALONG AIRCRAFT CENTER LINE AT EDGE OF STRINGER BETWEEN FRAME 29 TO 32. MANUFACTURER CONTACTED. DAMAGE REPAIRED AS PER BAE REPAIR INNSTRUCTION HC532H9018.

BAC	LYC	PRESSURE	CRACKED	05/21/2003	36866
146200	ALF502R5	FUSELAGE	36866		

(CAN) DURING COMPANY SPECIAL FLEET INSPECTION 20 INCH CRACK DISCOVERED IN THE WHEEL WELL UPPER PRESSURE SKIN ALONG AIRCRAFT CENTER LINE AT EDGE OF STRINGER BETWEEN FRAMES29 TO FRAME 32. MANUFACTURE CONTACTED. DAMAGE REPAIRED AS PER BAE REPAAIR INSTRU CTION HC532H9018.

BBAVIA	LYC	WINDOW	DAMAGED	04/15/2003	
7GCBC	O320A2D	41373	COCKPIT		

(CAN) THE ONLY EXPLANATION WE HAVE FOR THIS BURNED AREA COMES FROM THE FEW TIMES THIS AIRCRAFT HAS BEEN PARKED OUTSIDE, OR DURING FLIGHT. IT MIGHT SOUND CRAZY, BUT SUNLIGHT MUST HIT THE GLASS AT THE RIGHT PERFECT ANGLE, BUNDLE THE LIGHT LIKKE A MAGNIFYING GLASS AND THEN HIT THE VINYL BEFORE AIRCRAFT WAS REBUILT BY AMERICAN CHAMPION IN 1996.

BBAVIA	LYC	CONTROL	FRAYED	07/07/2003
8GCBC	O360C2E	19023	TE FLAPS	

(CAN)TE FLAP CABLE FRAYED AT UPPER RIGHT PULLEY.

BEECH	PWA	STRINGER	CRACKED	06/05/2003
200BEE	PT6A41	50440014523	FUSELAGE	

(AUS) NR 7 STRINGER RT SIDE CRACKED. FOUND DURING INSPECTION IAW AD 200/55 AMDT1.

BEECH	PWA	FRAME	CRACKED	06/16/2003	
200BEE	PT6A41	50420013954	FUSELAGE	200	

(AUS) FUSELAGE FRAME CRACKED AT FLOOR HEIGHT ON RT SIDE. FRAME IS LOCATED AT FS 207.125.

BEECH	CONT	SPAR	CRACKED	04/15/2003
58	IO520F	002430018N	LT WING	

(AUS) SPAR WEB CONTAINED TWO CRACKS IN THE AREA OF LT UPPER WING ATTACHMENT POINT. CRACK WAS LOCATED AROUND HUCK BOLTS. CRACK LENGTH 12.7MM (0.5IN). AIRCRAFT HAD SUFFERED A WHEELS UP LANDING IN THE PAST.

BEECH	LYC	HEATER	MISWIRED	05/15/2003
76	O360A1G	B4050	AIR CONDITIONING	

(AUS) HEATER INCORRECTLY WIRED. INVESTIGATION FOUND THAT THE OVERHEAT CUTOUT AND COMBUSTION PRESSURE SWITCH HAD NOT BEEN WIRED UP. THIS ALLOWED THE HEATER TO SOURCE FUEL AND IGNITION WITHOUT AIRFLOW AND OVERHEAT PROTECTION.

BEECH	CONT	RUDDER PEDAL	WORN	05/07/2003
95B55	IO470L	505243263	COCKPIT	

(CAN) AFTER FINDING A BROKEN RUDDER PEDAL, AN INSPECTION WAS CARRIED OUT ON THE OTHER AIRCRAFT. ON ONE OF THE AIRCRAFT, THE ATTACHMENT POINT FOR THE RUDDER PEDAL WAS FOUND EXCESSIVELY WORN IN THE SAME LOCATION AS THE BROKEN PEDAL FOUND ON THE OTHER AIRCRAFT. INSPECTING THIS ATTACHMENT PROPERLY CAN BE ACCOMPLISHED BY REMOVING THE ATTACHMENT HARDWARE AND INSPECTING THE PIVOT POINTS. THE DESIGN OF THE RUDDER PEDAL AND ITS ATTACHEMENT TO THE BRAKE MASTER CYLINDER CAUSES THE PERSON INSPECTING THE PEDAL TO ASSUME THAT THERE IS NOT ANY WEAR.

BEECH	CONT	FUEL CELL	CONTAMINATED	05/17/2003
95B55	IO470L			

(CAN) DURING CREW WALK AROUND AND ACTUATION WATER DRAINS, CREWS CONSISTENTLY FIND WATER EVEN IF COMPLETELY DRAINED ON PREVIOUS FLIGHT. AIRCRAFT INSPECTED AND ALL FUELCAPS COMPLETELY RESEALED AND SEAL SEATS CLEANED. ALL FUEL BLADDERS INTERNAALLY INSPECTED AND FOUND MULTIPLE LARGE WRINKLES TRAPPING WATER SLUGS. ALL BLADDERS DRAINED. DURING INSPECTION IT WAS NOTED THAT THERE IS NO POSSIBLE WAY TO FLATTEN THE BOTTOM OF EACH BLADDER. THE BLADDERS ARE ALL PHYSICALLY LARGER THAN THE WING SECTIONS THAT THEY LIVE IN. RAYTHEON TECH SUPPORT NOTIFIED AND THEY RESPONDED BYTELLING US THAT ALL OF THE BARON AIRCRAFT ARE LIKE THAT. RECOMMENDED TO JUST CLEAN OUT THE WATER AND MAKE SURE FUEL CAPS SEAL PROPERLY. ALL TANKS RESEALED

BEECH	PWA	JANITROL	NOZZLE	LEAKING	03/28/2003
B90	PT6A20	H11D59		HEATER	

(CAN) HEATER UNSERVICEABLE, LEAK FOUND ON HEAD ASSY. PARTS INSTALLED, NOZZEL, GASKETS, ELEC GROUND, ELEC WASHERS, GASKET HEAD, IGN, IGN UNIT, VALVE, BRUSH KIT, FILTER, VENT BLOWER MOTOR O/H. HEATER, SMOKY BLACK, PARTS INSTALLED, REG VALVE, VALVE, IGN, EXHAUST BLK SMOKE, REMOVED HEATER FOR LEAK CHECK, NO LEAK ON COMBUSTION TUBE, REMOVE HEAD ON TUBE FOR INSP, FUEL NOZZLE, INSP FOR SPRAY PATTERN, NOZZLE INSTALLED. 1 GALLON, REINSTALL NOZZLE, 1 GALLON. HEATER REINSTALLED IN A/C, HEATER TEST, WORKING

BELL	LYC	SPAR	CRACKED	06/07/2003	19119
204B	T5311B	20403082506	TAILBOOM		

(CAN) ENGINEER OPENED TAIL ROTOR DRIVESHAFT COVER TO CHANGE COUPLINGS AND FOUND A CRACK HAD DEVELOPED IN THE VERTICAL FIN SPAR. STARTING AT THE TOP LIGHTENING HOLE AND GOING LEFT TO THE OUTER EDGE OF THE SPARE. THE OUTER LT SKIN WAS ALSO CRRACKED APPROX. SIX INCHES. TAILBOOM WAS REPLACED

BELL	PWA	LINE	RUPTURED	07/01/2003
212	PT6T3	70012J22OW234	HYDRAULIC SYS	

(CAN) THE PILOT REPORTED A NOISE (FROM AN UNLOADED HYDRAULIC PUMP) FOLLOWED BY THE SMELL OF HYDRAULIC FLUID. HYDRAULIC PRESSURE ON SYSTEM NUMBER 2 DROPPED TO ZERO. THE PILOT INITIATED AN UNSCHEDULED LANDINGTO INVESTIGATE THE PROBLEM. AFTEER LANDING A CHAFED HYD LINE FROM THE NUMBER 2 HYDRAULIC PUMP WAS DISCOVERED. THE LINE WAS REPLACED AND THE AIRCRAFT RETURNED TO SERVICE.

BELL FRAME CRACKED 06/11/2003
407 2060323081215 TAILBOOM
TAILBOOM FRAME CRACKED AT UPPER RT MOUNT HOLE. TO BE SENT TO MFG.
BELL ALLSN BLEED VALVE LOOSE 06/03/2003
407 250C47B 23005366 ENGINE
BLEED VALVE BODY EXCESSIVELY LOOSE. REPLACED.
BELL ALLSN BLEED VALVE INOPERATIVE 06/03/2003 4009
407 250C47B 23005366 ENGINE
BLEED VALVE PRODUCING HIGH TOT. REPLACED.
BELL ALLSN BLEED VALVE INOPERATIVE 06/03/2003 13609
407 250C47B 23005366 ENGINE
BLEED VALVE PRODUCING LOW POWER. REPLACED.
BELL ALLSN BLEED VALVE INOPERATIVE 06/03/2003 9188
407 250C47B 23005366 ENGINE
BLEED VALVE PRODUCING HIGH MGT. REPLACED.
BELL ALLSN BLEED VALVE INOPERATIVE 06/11/2003
407 250C47B 23005366 ENGINE
BLEED VALVE PRODUCING HIGH TOT. TO BE SENT TO VENDOR FOR REPAIR.
BELL ALLSN BEARING LOOSE 05/19/2003 836
407 250C47B 406310405101 M/R PITCH LINK
PILOT FOUND UPPER END OF BEARING ASSEMBLY LOOSE ON PRE-FLIGHT. UPON INSPECTION BY MECHANIC FOUND THE RUBBER AROUND UPPER BEARING CRACKED AND BEARING CRACKED AND BEARING HOUSING HAD AXIAL PLAY.
BELL ALLSN RELAY FAILED 05/19/2003 888
407 250C47B SM20ACD300A2 STARTER
PILOT REPORTED START LIGHT WOULD NOT COME ON AND AIRCRAFT WAS UNABLE TO BE STARTED. TALKED TO PRODUCT SUPPORT AT MFG, STATED SOME 1K1 RELAYS WITHOUT A T STAMPED ON BOTTOM HAD A HIGH FAIL RATE. REPLACED RELAY WITH NEW RELAY STAMPED WITH T..
BELL ALLSN NOZZLE BENT 06/03/2003
407 250C47B 23001832 ENGINE
FUEL NOZZEL BENT. SCRAPPED.
BELL ALLSN NOZZLE BENT 06/03/2003
407 250C47B 23001832 ENGINE
ENGINE FUEL NOZZEL BENT. SCRAPPED.
BELL ALLSN BLEED VALVE MALFUNCTIONED 06/03/2003
407 250C47B 23005366 ENGINE
BLEED VALVE PRODUCING HIGH MGT AT CRUISE. REPLACED.
BELL BLADE DAMAGED 05/15/2003 1553
412 TAIL ROTOR
THIS INFO FOR FAA SDR. HOLE IN BLADE TIP AND FEATHERING BEARINGS LOOSE. PITCH HORN BUSHINGS MISSING. FEATHERING BEARINGS WORN AND BLADE HAD VOID AT TIP. TRUNNION BEARINGS HAD SOME ROUGHNESS. ACTION TAKEN: DISASSEMBLED, CLEANED & VISUAALLY INSPECTED PARTS. REASSEMBLED IAW 412-CR&O INSTALLING SERVICEABLE BLADE, NEW TRUNNION ORGS & SEALS, NEW PITCH HORN BUSHINGS, MARVEL BALANCED, TORQUED AND SAFTIES IAW 412-CR&O CH 64. COMPLIED WITH TB 412-95-134.
BELL SPINDLE DAMAGED 05/15/2003 15608
412 M/R HEAD
THIS INFO FOR FAA SDR. M/R HEAD DUE ERA SPINDLE INSPECTION. SINDLE SN A-356 HAD THREAD DAMAGE BEYOND LIMITS IAW 412-CR AND 0 CH. 62 (SCRAPPED) C/A: REMOVED SPINDLES AND VISUALLY INSPECTED ALL PARTS. C/W ERA SPINDLE INSPECTION AND TB 4112-03-190. INSPECTED AND REASSEMBLED IAW 412-CR AND O CH 62 AND TB 412-03-190. PURGE LUBED ARM AND CLEVIS ASSEMBLY WITH OBIL 28 GREASE. REASSEMBLED WITH ORIGINAL SERVICEABLE BOLTS. COMPLIED WITH TB 412-03-190 ERA 412 SPINDLE INSPECTION.
BELL PWA SERVO VIBRATION 05/15/2003 8482
412 PT6T3 212076004101 TAIL ROTOR
TAIL ROTOR SERVO HAS HIGH FREQ BUZZ IN TAIL ROTOR PEDALS WITH HYD SYSTEM TURNED ON. HAS CYLINDER WEAR, INTERNAL LEAKAGE ON PILOT VALVES REPLACED CYLINDER AND PILOT VALVES TESTED IAW CMM.
BOEING CONT HUB CRACKED 05/21/2003
A75N1 R670* PROPELLER
(CAN) PROPELLER WAS FOUND TO BE CRACKED BETWEEN LAMINATIONS, INSIDE THE INTERNAL HUB. MANUFACTURER INDICATES THIS MAY HAVE BEEN CAUSED BY MOISTURE CONTENT FLUCTUATIONS, WHICH WOULD CAUSE INCONSISTANT PROP TORQUE SETTINGS.THERE WAS NO EVIDENNCE OF A LOOSE PROP. PROP WAS ALSO QUITE OLD.
BOLKMS LYC BENDIX SCREEN LOOSE 06/09/2003
BK117A LTS101750B1 PT GOVERNOR
(CAN) RECEIVING INSPECTION, POST REPAIR, REVEALED A LOOSE SCREEN IN THE PG FITTING. THIS FITTING HAD BEEN REPLACED DURING THE REPAIR PROCESS. UNIT RETURNED TO MFG REPAIR STATION.
BOLKMS LYC SPLICE CRACKED 05/26/2003
BK117B LTS101750B1 1172213201 TAILBOOM
(CAN) CRACK ORIGINATING FROM TOOLING HOLE AND PROGRESSING UP VERTICAL AND ACROSS HORIZONTAL LEG OF SPLICE. SPLICE IS LOCATED ON LEFT FORWARD SECTION OF TAILBOOM ATTACH STRUCTURE.
BOLKMS LYC SPLICE CRACKED 05/26/2003
BK117B LTS101750B1 1172213202 FUSELAGE
(CAN) CRACK ORIGINATING AT TOOLING HOLE AND PROGRESSING HORIZONTALY ACROSS LOWER FLANGE.
BOLKMS ROTOR HEAD CRACKED 05/15/2003 13361
BO105A 10531714 AIL ROTOR
INNER SLEEVE BUSHING CRACKED. PITCH CHANGE BUSHINGS WORN. DISASSEMBLED FOR INSPECTIONS PERFORMED VISUAL AND NDT INSPECTIONS AS REQUIRED REPAIRED WORN, DAMAGED AND CORRODED PARTS. COMPLIED WITH 1200HR / 6 YEAR INSPECTGION ON HUB. 300 ANND 2400 HR BLADE INSPECTONS DONE. REASSEMBLED, TORQUED AND SAFETIED AS REQUIRED. INSTALLED 2 SERVICEABLE BLADES AND STATIC BALANCED. INSPECTED AND REPAIRED IAW BO105-REM301, MM CH 3334,101 AND 107. TT 13361.3
BOLKMS HEAD CRACKED 05/14/2003 13186
BO105S 10531714 TAIL ROTOR
TAILROTOR ASSY HAS CRACKED INNER SLEEVE BUSHING, CONTROL LEVER CLOSE TOLERANCE BOLT WORN. ACTION TAKEN: C/W PRELIMINARY INSPECTION AND FOUND INNER SLEEVE BUSHING CRACKED. DISSASSEMBLED, REMOVED PAINT, PRIMER AND VISUALLY INSPECTED ALL PPARTS. INSTALLED NEW RING, NEW BUSHINGS IN BLADE GRIPS AND INNER SLEEVE BUSHINGS. MACHINE AND NDT INNER SLEEVE BUSHINGS. SEE NDT TEST. INSTALLED NEW CLOSE TOLERANCE BOLT AND BUSHING INCONTROL LEVERS, NEW GRIP SEALS, C/W 1200 HR / 2400 HR 6 YR INSPECTION ON TAILROTOR. COMPLIED WITH 300 HR/ 2400 HR BLADE INSPECTION. REASSEMBLED TAILROTOR WITH NEW WASHERS, NUTS. STATIC BALANCED. INSPECTION IAW MM CHAP 33, 34, 101 TABLE 101-10.1 &107 TT 13186.1 TSI -0-.

CESSNA LYC HOUSING CRACKED 05/28/2003 7164
172RG O360F1A6 ACTUATOR
PILOT REPORTED HEARING LOUD POP. LT MLG WAS HANGING OUT OF WHEEL WELL. PUTTING GEAR SELECTOR IN DOWN POSITION, RT MAIN AND NLG EXTEND FULLY. LT WAS STILL HANGING LOOSE. ATTEMPT TO PUMP DOWN LT WITH EMERGENCY PUMP WAS UNSUCCESSFUL. A/C WWAS PUT INTO HANGAR AND GEAR INSPECTED. INSP REVEALED LT MAIN GEAR ACT HAD CRACKED THROUGH FWD MOUNTING BOLT HOLE. CRACK CAUSED PINION GEAR TO SEPERATE FROM RACK GEAR. THESE SEEM TO BE CRACKING AFTER COMPLING WITH AD AND MFG SB. ACT, S/N 5349 WAS FOUND CRACKED IN SAME LOCATION. ACT S/N 5384 WAS FOUND CRACKED IN SAME LOCATION. SEEMS NEW BUSHINGS THAT ARE INSTALLED AS PART OF SB MAY BE CAUSING SOME ADDED STRESS TO ACTUATORS.

CESSNA LYC AUDIO PANEL MISINSTALLED 06/02/2003
172RG O360F1A6 24700032 UHF SYSTEM
(CAN) CREW REPORTED BOTH VOR SYSTEMS WERE NOT FUNCTIONING COMPLETELY. VOR AUDIO SIGNAL COULD BE PICKED UP AND TO/FROM FLAG WORKED. INDICATOR NEEDLES WOULD NOT DEVIATE FROM CENTER. COMPONENTS FAILED TO DETERMINE SOURCE OF PROBLEM. A/C WAS SEENT TO FACILITY WHERE THEY DETERMINED THAT AUDIO PANEL DID NOT HAVE RELAYS INSTALLED FOR AUTOPILOT. IT WOULD APPEAR THAT AUDIO PANEL WAS DIFFERENT FOR A/C WITH FACTORY INSTALLED AUTOPILOTS. AUDIO PANEL DOES NOT LOOK DIFFERENT FROM FRONT, NO DISTINGUISHING PLACARDS TO WARN THAT UNIT IS FOR AUTOPILOT EQUIPPED MODELS ONLY. ALSO, NONE OF THE UNITS WE TRIED WERE SERIALIZED. RESULT WAS THAT PROPER AUDIO PANEL WAS INSTALLED FOR A/C AND ALL

CESSNA CONT BULKHEAD CRACKED 05/01/2003 4246
182N O470* 07126161 FUSELAGE
TIME SINCE LAST AD REQUIRED INSPECTION 901.8. ORIGINALLY INSPECTED ON 9/19/74 WITH 1246 TT, FOUND OK. REINSPECTED AT 1502 AND 2334.58 TT AND FOUND, OK. ALSO INSPECTED AT 3345.1 AND FOUND AIRWORTHY. CURRENT INSPECTION REVEALED TWO SMALL CRACKS .1250 AND .2500 INCH AT TOP OF RUDDER CABLE CUT-OUT AND FLANGE. FIN SPAR BOLTS WERE TIGHT. DYE PEN INSPECTION OF FIN SPAR ATTACH FITTINGS REVEALED NO OTHER DAMAGE. REPLACED BULKHEAD WITH SERVICEABLE ASSEMBLY. GASSER BANNER TOW HITCH WAS INSTALLED IAW STC SA-220-50 ON 8/14/73 TT 757.0 ON THE AFT BULKHEAD TAIL SKID BOLT. TIME OF REMOVAL IS UNKNOWN. AD 72-07-09.

CESSNA LYC CHECK VALVE LOOSE 05/28/2003 411
182S IO540* 1H525 VACCUM PUMP
PILOT REPORTED RIGHT VACUUM PUMP WARNING LIGHT WAS ON. DURING TROUBLESHOOTING, DISCONNECTED HOSE FROM RIGHT SIDE OF CHECK VALVE MANIFOLD TO CONNECT TEST KIT AND DISCOVERED TWO MISSING RIVETS, TWO RIVETS ABOUT TO FALL OUT AND TWO LOOSE RIVVETS ALL ON THE RIGHT SIDE OF CHECK VALVE ALLOWING VACUUM AIR TO LEK OUT BETWEEN, THE VALVE DIAPHRAM. PROBABLE CAUSE IS VIBRATION FROM ENGINE , ACTING ON HOSE CONNECTED THIS END, CANNOT SEE AT THIS TIME, ANY OTHER ROUTING OF HOSE.

CESSNA CONT PIN MISLOCATED 05/30/2003
310R IO520M MLG
(AUS) LANDING GEAR FORK BOLT CLEVIS PIN INCORRECTLY FITTED. CLEVIS PIN WAS FITTED BACK TO FRONT AND CONTACTED WHEEL WELL STRUCTURE CAUSING DAMAGE TO TORQUE TUBE SUPPORT BRACKETS PN 5027002-5. PERSONNEL/MAINTENANCE ERROR.

CESSNA CONT CONTACTOR ARCED 05/26/2003
310R IO520MB 08504691 STARTER
(CAN) ELECTRICAL SYSTEM FAILED. LT STARTER RELAY STUCK IN ON POSITION DURING START. STARTER ROTATED TILL BATTERY WAS RUN OUT AS IT WAS A HIGH LOAD. SERVICEABLE RELAY WAS INSTALLED, A NEW BATTERY AND OVERHAULED STARTER WERE INSTALLED, WIRINGG WAS CHECKED. PROBLEM WAS CORRECTED.

CESSNA CONT CONTROL FRAYED 06/06/2003
337A IO360D TE FLAP
(CAN) INSPECTION OF FLAP CABLES IAW SERVICE DIFFICULTY ALERT NR AL-2003-05, FOUND THREE FRAYED CABLE ENDS, ONE AT THE OUTBOARD BELLCRANK.

CESSNA CONT CONTROL DAMAGED 05/30/2003
337G IO360G 14601007 FLAP ACTUATOR
(CAN) AFTER RECEIVING SDR ALERT AL-2003-05 AN INSPECTION WAS CARRIED OUT ON OUR 337G. TWO CABLES ON BOTH SIDES WERE FOUND DAMAGED. THE DAMAGE WAS LOCATED EXACTLY IN THE SAME LOCATION AS MENTION IN THE ALERT IE AROUND THE SHARP BEND OF THE BBELLCRANK. ALL CABLES HAD TO BE REMOVED TO SEE THE DAMAGE.HAD THEY NOT THE DAMAGE WOULD OF WENT UNNOTICED. BOTH SETS OF CABLES WERE REPLA CED WITH SERVICEABLE

CESSNA CONT FORK SHEARED 05/21/2003
402B TSIO520AE 50452112 NLG
(CAN) PILOT REPORTS GEAR WOULD NOT RETRACT ON TAKE OFF. HE ELECTED TO LEAVE DOWN FOR FLIGHT MAINTAINING PROPER SPEED.ON LANDING TRUCKS WERE REQUESTED BUT NO EMERGENCY DECLARED. LANDING WAS UNEVENTFUL. WHEN MAINTENANCE INSPECTED GEAR THEYY FOUND THE ADJUSTING FORK SHEARED AT THE FIRST THREAD. MAINTENANCE TRIED TO USE THE SAME PART OFF ANOTHER A/C WHICH WAS IN OUR HANGER FOR MAINTENANCE, BUT FOUND IT CRACKED IN THE SAME PLACE. NEW PART INSTALLED RIGGED AND GEAR SWING CARRIED OUT AND RELEASED FOR FURTHER FLIGHT.

CESSNA GARRTT SPRING BROKEN 05/26/2003
441 TPE33110 ENGINE CONTROL
(CAN) ON TAKEOFF ROLE AIRCRAFT LT ENGINE ONLY DEVELOPED 1,000 LBS TORQUE. AIRCRAFT RETURNED TO HANGAR. MAINT RAN AIRCRAFT IN MANUAL MODE & AIRCRAFT DEVELOPED POWER. AFTER TROUBLE SHOOTING MAINTENANCE FOUND O-SPRING BROKE IN THE THROTTLE QUAADRANT AND FELL INTO THE THROTTLE POT SENDING A FALSE READING TO THE COMPUTER. LIMITING TORQUE.

CESSNA WILINT STARTER GEN FAILED 06/19/2003
525 FJ441A 230850041 ENGINE
(CAN) THE LEFT HAND GENERATOR WENT OFF LINE IN FLIGHT. AFTER LANDING WE TRIED TO STARTTHE LEFT ENGINE AND NO RESPONSE,THE LEFT STARTER GENERATOR WAS CHANGE WITH AN OVERHAUL UNIT. THE LEFT GENERATOR WAS DUE FOR OVERHAUL AT 2049 HOURS.

CESSNA CESSNA BOLT BROKEN 10/09/2002 8533
550 NAS464P4A10 TORQUE TUBE
AFTER TAKEOFF, PILOT NOTICED NOISE IN NOSE AREA, WIND NOISE IN COCKPIT. CREW WAS ABLE TO SEE NOSE GEAR DOORS WERE OPEN AND STEADY. REDUCED SPEED AND LOWERED LANDING GEAR WITH NO PROBLEMS. DOORS REMAINED OPEN AND STEADY. A/C LANDED WITHOUUT MISHAP. FOUND THAT BOLT HAD BROKEN THAT HOLDS DOOR BELLCRANK/TORQUE TUBE IN POSITION. BOLT IS AT PIVOT POINT ON RT SIDE OF A/C. WHEN TORQUE TUBE WAS REMOVED, CRACK WAS FOUND BUT DETERMINED THAT THIS WAS NOT RELATED AND HAD BEEN THERE A LONG TIME. BOLT FOUND BREAK WAS TYPICAL OF OVER TORQUEING. BREAK WAS AT FIRST THREAD, HAD NO STRESS INDICATIONS. BOLT IS CLOSE TOLERANCE BOLT, NORMALLY HAS SHEARING LOAD IN INSTALLATION. BOLT WAS NOT SHEARED.

CESSNA PWA INSULATION BURNED 06/02/2003
550 JT15D4 HEADLINER
(CAN) DURING AN INSPECTION ON THE AIRCRAFT, THE COCKPIT HEADLINER WAS REMOVED TO ACCESS THE G SWITCH FOR A FUNCTIONAL CHECK. ONCE THE HEADLINER PANEL WAS REMOVED A SECTION OF INSULATION THAT WAS NEXT TO THE MAP LIGHT FOR THE CO-PILOT WAS FOOUND SCORCHED AND BRITTLE FROM CONTACT WITH THE BACK OF THE LIGHT ASSEMBLY. THE INSULATION WAS REMOVED AND THE PANEL RE-INSTALLED AND THE AIRCRAFT WAS RETURNED

CESSNA	PWA	ROHR	HOSE	RUPTURED	05/20/2003	
560CES	JT15D1	AE1009195G013		THRUST REVERSER		

(CAN) WHILE PREPARING TO REFUEL THE AIRCRAFT, THE PILOT NOTED A LARGE QUANTITY OF HYDRAULIC FLUID ON THE RT ENGINE/THRUST REVERSER AREA. THE AFT HYDRAULIC HOSE CONNECTING THE TAIL ROTOR TO THE PYLON HAD BURST AT APPROXIMATELY MID LENGTH. (TTHIS IS THE AREA WHERE THE HOSE MAKES A 90 DEGREES TURN.) THE CREW HAD NO INDICATION OF THE PROBLEM DURING LANDING AND TAXI.

CESSNA	PWA	WHEEL	UNBONDED	05/19/2003	
560XL	PW545A	0316138	NLG		

(CAN) AT LIFT OFF PILOT HEARD AND FELT STRONG VIBRATIONS ON THE NOSE WHEEL. HE DECLARED AN EMERGENCY AND RETURNED TO BASE. DURING THE INVESTIGATION FOUND NOSE WHEEL OUT OF BALANCE. NOSE WHEEL ASSY WAS STRIPPED MAY 27/03 AND FOUND BALANCE PAATCH GLUED TO TIRE UNBONDED WHICH CAUSE THE VIBRATION, THE PATCH WEIGHT IS 1 OUNCE.

CESSNA	ALLSN	WIRE HARNESS	SHORTED	06/24/2003	
750	AE3007C	PQ020JE004	RT CARGO BAY		

(CAN) AMBER - RT WINDSHIELD HEAT INOPERATIVE ON ENGINE INDICIATING AND CREW ALERT SYSTEM POPPED. SB #HK062 AC POWER TO R/H WINDSHIELD. WIRE BUNDLE PQ020 AND JE004 TOUCHING AND HEAT SHRINK FAILURE CAUSING SB HK 062 TO POP.REPLACED HEAT SHRINNK PROBLEM ELIMINATED.

CESSNA	CONT	HUB	CRACKED	05/19/2003	
A188B	IO520*	C58	PROPELLER		

(AUS) PROPELLER HUB CRACKED IN BLADE SOCKET THREADED AREA.

CESSNA	LYC	SEAL	LEAKING	06/09/2003	
T206H	TIO540AJ1A	STD213	ENGINE		

(CAN) FOLLOWING A FLIGHT TEST THAT WAS CARRIED OUT AFTER ENGINE INSTALLATION. THE PILOT NOTICED AN EXCESSIVE OIL LEAK. THE ENGINE HAD RETURNED FROM OVERHAUL. FURTHER INVESTIGATION REVEALED THAT OIL SEAL WAS NOT INSTALLED. AN EMPTY SPACE WASS CREATED BECAUSE THAT SEAL WAS MISSING, CREATING AN EXCESSIVE OIL LEAK.

CESSNA	CONT	BELLCRANK	BROKEN	05/28/2003	
T310P	TSIO520B	08421022	NLG WW		

(CAN) WHEN GEAR WAS SELECTED UP AFTER TAKE OFF A LOUD SNAP WAS HEARD THE RED GEAR LIGHT WAS ON. WHEN GEAR WAS SELECTED DOWN THE 3 GREEN GEAR LIGHTS WAS OBTAINED. THE AIRCRAFT LANDED WITHOUT FURTHER INCIDENT. FOUND BROKEN IDLER BELLCRANK. MAAINTENANCE IS CHECKING RIGGING AND ANY OTHER CAUSES.

CESSNA	CONT	LINE	SEVERED	06/05/2003	
TU206G	TSIO520M	1200106253	FUEL SYSTEM		

(CAN) DURING THE LAST OPS 4 INSPECTION, SEB 95-6, RUBBER FUEL HOSE INSPECTION AND REPLACEMENT WAS ACCOMPLISHED. SUBSEQUENT INSPECTION REVEILED THAT THE FUEL PRIMER LINE FROM THE MANIFOLD TO THE PRIMER T FITTING ROUTED NEAR THE ALTERNATOR PUULLEY WAS FOUND BROKEN IN TWO AND THE TEE FITTING CHAFED ON THE ALTERNATOR PULLEY. AIR TIME SINCE INSPECTION / MODIFICATION WAS 19.1 HOURS. THE ABSENCE OF CLAMPS AT THET FITTING TO THE INTAKE MANIFOLD AND THE INCREASED STIFFNESS OF THE NEW LINES CAUSED INCREASED STRESS ON THE RIGID PRIMER LINE LEAD TO THE RIGID LINE FAILURE. A NEW RIGID LINE AND FITTINGS WERE INSTALLED AND THE T FITTING CLAMPED AS DESCRIBED IN THE MAINTENANCE MANUAL AND IPC.

CESSNA	CONT	SPAR CAP	CORRODED	04/24/2003	
U206F	IO520*	122210523	RT WING		

(AUS) RT WING SPAR CAP RIVET HEADS MISSING. INVESTIGATION FOUND THE SPAR CAP EXTENSIVELY CORRODED.

CESSNA	CONT	LINE	CHAFED	04/02/2003	
U206F	IO520F	120040676	FUEL SYSTEM		

(AUS) FUEL LINE CHAFED BY AILERON CABLE.

CESSNA	CONT	BOLT	BROKEN	03/25/2003	
U206G	IO520*	NAS464P5A42	MLG DRAGLINK		

(AUS) NOSE LANDING GEAR DRAG LINK ATTACHMENT BOLT HEAD SEPARATED FROM SHANK.

CESSNA	CONT	ELEVATOR	FOD	06/18/2003	
U206G	IO520F	179856	LEFT		

(AUS) ELEVATOR JAMMED. INVESTIGATION FOUND A PIECE OF METAL PROTRUDING FROM THE LT ELEVATOR BALANCE HORN DIRECTLY BEHIND THE BALANCE WEIGHT ATTACHMENT RIB. METAL MEASURED 12.7MM BY 57.15MM (0.5IN BY 2.25IN) WITH A THICKNESS OF 0.8128MM (0.032IN) AND APPEARS TO BE ALCLAD. THE METAL CONTAINED A HOLE INTO WHICH A PK TYPE SCREW HAD BEEN INSERTED AT SOME STAGE. SUSPECT METAL HAD AT ONE TIME BEEN ATTACHED TO THE ELEVATOR TIP CUFF AND HAD COME ADRIFT. FOD.

CLARK	SEAL		LEAKING	06/11/2003	574
1000CL			SWASHPLATE		

LEAKING GREASE UNDER BOOT. REPLACED SEAL (2 EA) 206-010-460-001 DUE TO LEAKING AND WEAR. REPAIRED.

CLARK	CLAMP	DEFORMED	06/10/2003	10624
1000CL	206076022101	PUMP		

HYD PUMP HAS A DEFORMED CLAMP FROM SUPPLY P/N 8505075. TO BE SENT TO VENDOR.

CLARK	SERVO VALVE	BINDING	06/12/2003	
1000CL	41000413	MAIN ROTOR		

STICKING AND BINDING UNDER PRESSURE DURING FINAL TEST OF SERVO. SENT FOR WARRANTY REPAIR.

CNDAIR	GENERATOR	FAILED	04/13/2003	
CL2151	2CM70D6A	ELECTRICAL		

(CAN) TWO GENERATORS HAD 8130 FORMS STATING THAT THE GENERATORS HAD BEEN OVERHAULED AND TESTED. AFTER A GROUND GENERATOR FIRE DURING INITIAL RUNUP ON THE FIRST UNIT, THE SECOND GENERATOR THAT HAD BEEN INSTALLED ON ANOTHER AIRCRAFT BUT NOT RRUN YET WAS REMOVED FOR INVESTIGATION. COMPANY OVERHAUL SHOP INSPECTED THE INTERNAL PARTS OF THE REMAINING GENERATOR AND FOUND EVERYTHING CLEAN EXCEPT THAT THE BRUSHES WERE BRAND NEW AND HAD NOT BEEN RUN IN AT ALL. UPON 5 MINUTES OF TESTING WITH A CURRENT ON TO WEARING THE BRUSHES, THE GENERATOR STARTED MAKING STRANGE NOISES AND BEGAN SMOKING. TEST WAS HALTED. GENERATORS SENT BACK TO SUPPLIER FOR INVESTIGATION AND CREDIT.

CNDAIR	PWA	CYLINDER	CRACKED	06/18/2003	
CL2151	CA3		ENGINE		

(CAN) AFTER A SCOOPNG RUN THE CREW NOTICED A 30 DROP IN THE BMEP ON THE LT ENGINE. LOAD WAS DROPPED AND A/C CLIMBED TO 2500 FT AND EXECUTED A PRECAUTIONARY ENGINE SHUT DOWN.THE A/C FLEW TO BASE WHERE IT LANDED UNEVENTFULLY. THE NR 5 CYLINDDER WAS CRACKED. CYLINDER WAS REPLACED AND A/C RETURNED TO

CNDAIR	PICCOLO TUBE	MISMARKED	05/30/2003	
CL600*	600800398	PICCOLO TUBE		

(CAN) WHILE CARRYING OUT SB 600-0718 INSPECTION OF PICOLO TUBES AND DUCTS FOR CORRECT ALIGNMENT IT WAS FOUND THAT THE RT OUTBOARD PICCOLO TUBE BLEED HOLES WERE IMPROPERLY POSITIONED AS IDENTIFIED IN THE SB. THE PICCOLO TUBE WAS REMOVED AND IT WAS FOUND THAT THE TUBE HAD BEEN MANUFACTURED FOR A LT INSTALLATION AND IDENTIFIED AS A RT TUBE BY PART NUMBER AND ORINTATION LABLE. A CORRECTLY IDENTIFIED AND MANUFACTURED TUBE WAS INSTALLED AND THE AIRCRAFT WAS RETURNED TO SERVICE.

CNDAIR WINDOW BROKEN 05/15/2003
CL6002 601R3303311 COCKPIT
(CAN) DURING THE FIRST PRODUCTION FLIGHT TEST AT 8,000 FEET/250 KTS AND APPROXIMATELY 2.5 PSID IN DESCENT. THE LT SIDE WINDOW SHATTERED.

CNDAIR VANE OUT OF 05/14/2003
CL6002 601R591541 AOA
(CAN) WHILE DOING THE CLEAN STALL TEST, THE SHAKER FIRED 2 KNOTS ABOVE THE CALCULATED VALUE. THEN, WHILE SLOWING THRU 2 KNOTS BELOW THE SHAKER, THE AIRCRAFT STARTED BUFFETING AND DEVELOPED A PRONOUNCED ROLLTO THE LEFT. THE PUSHER ACTIVATED 3 KNOTS ABOVE THE CALCULATED VALUE, BUT THE ANGLES AT THE PUSHER SHOWED 14.5 & 14.6. AIRCRAFT RETURNED WITHOUT FURTHER OCCURRENCES. UPON ARRIVAL, THE LEFT AND RIGHT AOA VANES NUL ADJUST WERE FOUND OUT OF TOLERANCES AT 0.7/0.6 INSTEAD OF 0.8 IAW FTP601R2731U. VANES WERE ADJUSTED IAW FTP601R2731U AND AIRCRAFT RETURNED TO FLIGHT WITHOUT FURTHER OCCURRENCES.

CNDAIR GE BOLT CORRODED 06/18/2003
CL6002 CF343A1 NAS620434D NLG DOOR ACT
(CAN) ROLLER BEARING WITH NLG DOORS FULLY CLOSED SHOULD FALL WITHIN ITS MECHANICAL CAM-LOCK WHEN FUNCTIONING NORMALLY. WHEN HYDRAULICS ARE REMOVED, RETRACT ACTUATOR WILL RELAX AND CAM-LOCKED ROLLER-BEARING WILL KEEP NLG DOOR FULLY CLOSED,, PREVENTING FROM FALLING 'OPEN'. IF PIVOT BOLT BECOMES CORRODED AND RESTRICTS MOVEMENT OF ITS SPRING-LOADED PIVOT LEVER. ROLLER BEARING CAN HANG-UP AND NOT FALL INTO ITS CAM-LOCK SLOT. WHEN HYDRAULICS ARE REMOVED AND DOOR RETRACT ACTUATOR RELAXES, DOORS WILL DROP OPEN.

CURTIS PWA COTTER PIN MISMANUFACTURE 05/28/2003
C46FAI R2800* MS24665143 FUSELAGE
(CAN) THE COTTER PINS RECIEVED FROM AIRCRAFT PARTS INTERNATIONAL ARE FAULTY AROUND THE HEAD. THE COTTER PINS ARE MANUFACTURED BY WESTERN WIRE. WE RECIEVED THEM IN MARCH 2003. WHEN I CALLED THE SUPPLIER AND EXCHANGED LOT NUMBERS, HE HAD A DIIFFERENT LOT NUMBER OF COTTER PINS THAT DID THE SAME THING. BREAK AT THE LOOP.

DHAV PWA SELECTOR LEAKING 12/18/2002
DHC2* R985* TC173007 FUEL SYSTEM 269
WITH FUEL SELECTOR VALVE IN OFF POSITION FUEL LEAKS BY VALVE, SLIGHT PRESSURE ON CABLE DRUM ON VALVE MAKES IT WORSE. (SIDE LOAD) THIS VALVE MUST BE CHECKED DURING AND ANNUAL, IN THE OFF POSITION AND PUTTING PRESSURE ON DRUM TO SEE IF FUEL FLOWS THROUGH VALVE IN THE OFF POSITION.

DHAV PWA GOVERNOR FAILED 05/24/2003
DHC2MK R985AN14B 1A2G5 PROPELLER
(CAN) PROPELLER MOVED TO LOW RPM POSITION AS POWER WAS APPLIED FOR TAKEOFF, TAKEOFF WAS ABORTED AND AIRCRAFT TAXIED BACK TO DOCK. PROPELLER GOVERNOR REPLACED WITH OVERHAULED UNIT, MAIN OIL FILTER INSPECTED AND FOUND CLEAN. AIRCRAFT GROUND RRUN AND HIGH SPEED WATER RUN COMPLETED SATISFACTORY, PROPELLER FUNCTION FOUND NORMAL. REMOVED GOVERNOR INSPECTED FOR METAL CONTAMINATION, NONE FOUND. GOVERNOR SENT TO HOPE AERO PROPELLER FOR INSPECTION AND OVERHAUL.

DHAV PWA HARTZL NUT CRACKED 05/27/2003
DHC2MK R985AN14B B1894 PROPELLER
(CAN) PROP WAS REMOVED DURING ENGINE REPAIRS, NUT HOLDING PROP TO CRANKSHAFT WAS FOUND CRACKED. NUT WAS CRACKED FROM NOTCH FOR INSTALL/REMOVAL TOOL TO HOLE FOR LOCKING CLIP. NUT WAS REPLACED WITH OVERHAULED UNIT AND PROP WAS REINSTALED ANDD AIRCRAFT RETURNED TO SERVICE.

DHAV PWA PLUG SHORTED 06/03/2002
DHC2MK R985AN14B C2N2181A SKL32138AN MAGNETO
(CAN) THE ENGINE QUITE IN CRUISE AND THE PILOT MADE A DEAD STICK LANDING ONTO THE WATER. UPON INSPECTION FOUND THE SAFETY GROUNDING TAB IN THE FIREWALL PLUG APPEARED TO BE BROKEN OFF AND FELL ACROSS THECONTACT PINS, SHORTING OUT BOTH MAGS. NOT SURE BECAUSE THE PLUG WOULD HAVE TO BE DESTROYED TO GET IT APART.

DHAV PWA TORQUE TUBE BROKEN 05/28/2003 13672
DHC2MK R985AN14B C2T29A LT ELEVATOR
(CAN) LT ARM WHICH CONNECTS LT ELEVATOR TRIM TAB CONTROL ROD TO TORQUE TUBE BROKEN, COMPLETELY OFF. NOTE: THIS ASSEMBLY IS OF PRE-MOD, NATURE AND PROBABLY BROKE DUE TO MISHANDLING.POST MOD ARM HAS A REINFORCING GUSSET WHICH SUBSTANTIALLY IMPROVES STRENGTH/RIGIDITY.

DHAV PWA STRUT CRACKED 07/02/2003
DHC3 PT6A34 VALC3W1005 LT WING
(CAN) DURING A ROUTINE DAILY INSPECTION A 7 INCH CRACK ON THE UPPER SURFACE OF THE LT LOWER WING STRUT IN THE TRAILING EDGE SKIN WAS OBSERVED. 4.2 HOURS OUT OF A 100 HOUR INSPECTION. THE STRUT WAS GIVEN TO A DAR, WHO IS CONDUCTING AN INVESSTIGATION. THE REPORT SHALL BE FORWARDED TO THIS SDR WHEN RECEIVED.

DHAV PWA RELAY SHORTED 06/26/2003
DHC630 PT6A27 MS24171D1 ELECTRICAL
(CAN) DURING FLIGHT CREW SMELLED ELECTRICAL BURNING ODOR. SYS WERE SYSTEMATICALLY SHUT DOWN INCLUDING, AVIONICS AND AIRCRAFT MASTER, ODOR DISSIPATED. ALL RADIOS WERE SWITCHED OFF IN AN ATTEMPT TO SECURE OPERATION OF ONE RADION FOR COMMS. AAIRCRAFT AND AVIONICS MASTER WERE SWITCHED ON WITH AN IMMEDIATE RETURN OF ODOR. AIRCRAFT AVIONICS MASTER WERE AGAIN ISOLATED AND THE ODOR DISSIPATED. AIRCRAFT MASTER WAS TURNED ON TO ESTABLISH BASIC AIRCRAFT SYSTEMS WITH A RETURN OF THE ODOR. THE AIRCRAFT WAS RECOVERED TO MAIN MAINTENANCE BASE WITHOUT FURTHER INCIDENT. UPON INVESTIGATION IT WAS REVEALED THAT THE POWER TERMINAL OF THE NR 1 AVIONICS RELAY HAD SHORTED TO GROUND. AT THIS TIME THE DHAV PWA
PIN LOOSE 04/29/2003
DHC630 PT6A27 ELEVATOR (CAN) PILOT REPORTED THAT HE RAN OUT OF NOSE DOWN ELEVATOR TRIM WITH FLAPS 30 DEGREES. INSPECTED FLAP TRIM INTERCONNECT AND FOUND NO FAULTS. INSPECTED ELEVATOR TRIM AND FOUND THAT NOSE DOWN TRIM WAS LIMITED BY A STOP IN THE COCKPIT TRIM WHEEEL. FOUND THAT PIN THAT RIDES IN GROOVE IN TRIM WHEEL AND DRIVES TRIM POSITION INDICATOR HAD POPPED OUT AND INTO NEXT GROOVE. REPOSITIONED IN APPROPRATE LOCATION & OPS CHECK OK. RERIGGED POSITION INDICATOR AND TEST FLEW AIRCRAFT - OPS NORMAL.

DHAV PWA CHIP DETECTOR CRACKED 06/06/2003
DHC630 PT6A34 3034081 ENGINE
(CAN) DURING INSPECTION OF MAGNETIC PLUG , A STRESS CRACK WAS FOUND AT THE BASE OF THE PLUG. UNIT WAS REMOVED FROM SERVICE

DHAV PWA SEAL SWOLLEN 05/27/2003
DHC710 PT6A50 CVR67 ACCESS PANEL
(CAN) WHILE REMOVING FUEL LIDS TO ACCESS FUEL TANKS FOR SNAG RECERTIFICATION FOLLOWING MAJOR INSPECTION, IT WAS NOTICED THAT THE NEW LIGHTNING SEAL P/N CVR 67 THAT WAS INSTALLED IN THE LAST WEEK OR TWO HAD SWOLLEN ALMOST 50 PERCENT LARGER TTHEN ITS NORMAL SIZE AND THE MATERIAL HAD SOFTEN FROM EXPOSURE TO JET FUEL. THE SEAL WAS ALSO DISLODGED AND HANGING OFF THE LADDER PLATES. WE TESTED OUR STOCK AND FOUND THAT ONLY ONE BATCH OF THE CVR 67 IS AFFECTED BY FUEL WE HAVE REMOVED THIS BATCH FROM OUR STOCK AND REPLACED THE SEAL ON THE AIRCRAFT. WE ARE ALSO GOING TO REPLACE THE SEAL ON ONE OTHER AIRCRAFT THAT WAS ISSUED THIS SEAL FROM THE SAME BATCH NR.

DHAV PWA SOLENOID FAILED 06/13/2003 35478
DHC710 PT6A50 574205A SELECTOR VALVE
(CAN) ON APPROACH THE LANDING GEAR WAS SELECTED DOWN ALL THREE GEAR STAYED UP AND LOCKED. AN EMERGENCY GEAR EXTENSION WAS COMPLETED AND THE AIRCRAFT LANDED WITHOUT FURTHER INCIDENT. MAINTENANCE JACKED THE AIRCRAFT AND ATTEMPTED TO COMPLETE GEAR SWINGS WHEN THEY SELECTED GEAR UP THERE WAS NO RESPONSE. MAINTENANCE FOUND THAT THE LANDING GEAR SELECTOR VALVE SOLENOID DID NOT MAKE ANY NOISE WHEN THE GEAR SELECTOR WAS UP OR DOWN. THE LANDING GEAR SELECTOR VALVE SOLENOID WAS REPLACED AND THE GEAR SWUNG WITHOUT FURTHER INCIDENT.

DHAV PWA LINE CRACKED 06/18/2003 34525
DHC810 PW120A 82960010115 HYD SYSTEM
(CAN) A HYDRAULIC LINE FROM THE NR 2 HYDRAULIC SYSTEM THAT FEEDS THE RUDDER PRESSURE REGULATOR DEVELOPED A HAIRLINE CRACK IN THE TAIL SECTION. . THE NR 2 SYSTEM HYDRAULIC QUANTITY DEPLETED TO BELOW MINIMUM. AN EMERGENCY LANDING GEAR EXTENSSION WAS CARRIED OUT AND THE AIRCRAFT LANDED WITHOUT FURTHER INCIDENT. A FLEXIBLE HYDRAULIC LINE WAS INSTALLED TEMPORARILY AS DETAILED IN MAINTENANCE MANUAL CHAPTER 20-50-52. THE NR 2 HYDRAULIC PUMP WAS REPLACED AS A PRECAUTION, GEAR SWINGS CARRIED OUT AND THE AIRCRAFT RETURNED TO SERVICE.

DHAV PWA BRACKET BROKEN 05/28/2003
DHC810 PW120A 85711423101 TORQUE SENSOR
(CAN) AT THE END OF THE LANDING ROLL THE FLAPS WERE SELECTED UP. FLAPS TRAVELLED TO APPROX 5 DEG AND STOPPED. FLAP DRIVE ANNUN ILLUMINATED, FLAPS WOULD NOT MOVE UP OR DOWN. MAINT WAS DISPATCHED AND DISCOVERED SECONDARY FLAP DRIVE CABLE INTOO LT FLAP TORQUE SENSOR, SHEARED. LH FLAP TORQUE SENSOR BRACKET WAS FOUND BROKEN THROUGH ON TOP FOLD AND CRACKED ALONG LOWER FOLD. SOME MINOR LOOM DAMAGE OCCURED DUE TO THRASHING OF ADRIFT DRIVE CABLE.

DHAV PWA PROXIMITY FAILED 06/17/2003 26210
DHC830 PW123 858601 MLG 26210
(CAN) DURING SELECTION OF GEAR DOWN ON APPROACH , THE GEAR FAILED TO EXTEND . THREE RED GEAR LIGHTS ILLUMINATED , AMBER WARNING LIGHT IN SELECTOR HANDLE ILLUMINATED ,GEAR DOORS DID NOT OPEN. AIRCRAFT RETURNED TO ORIGINATING AIRPORT , ALTEERNATE GEAR EXTENSION USED , GEAR EXTENDED AND AIRCRAFT LANDED NORMALLY. PSEU SHOWING FAULT CODES 53 AND 55 (INTERNAL CARD FAILURES) . LANDING GEAR PROXIMITY CONTROL BOX (PSEU) REPLACED. GEAR SWINGS CARRIED OUT . AIRCRAFT RETURNED TO SERVICE , NO FURTHER FAULTS.

GULSTM RROYCE MOOG TUBE SHEARED 06/11/2003
G1159A SPEY5118 1159SCC2121 B120344 TE FLAPS
(CAN) AFTER REMOVING THE FLAPS TO REPAIR THE D TRACK WEB IAW AIRCRAFT SERVICE CHANGE 318B. THE LT OUTBOARD FLAP ACTUATOR SCREWJACK BALL RETURN TUBE COVER WAS FOUND SHEARED OFF (SUSPECT IMPROPER INSTALLATION). REPAIRED IAW CUSTOMER BULLETINN NR 99.

GULSTM RROYCE WIRE FAILED 04/14/2003
GIV TAY6118 L430E20 LIGHTS
(AUS) STROBE LIGHT WIRING LOCATED IN TAILCONE SHORTED TO SHIELDING. INVESTIGATION FOUND KAPTON POWER WIRE INSULATION CRACKED THROUGH TO INNER WIRES. SUSPECT CRACKING OCCURRED DUE TO LENGTH OF UNSUPPORTED WIRE, CONSTANT REMOVAL OF TAILCONE AAND PROPERTIES OF KAPTON WIRE.

HILLER LYC CONTROL FAILED 04/09/2003
UH12E VO540C2A HS105324 TAIL ROTOR
(AUS) TAIL ROTOR CONTROL CABLE FAILED. CABLE RUNS FROM RT PEDAL TO FIREWALL LOCATED BEHIND THE PILOT SEAT. CABLE HAD BEEN SUBJECTEDTO HEAT SOURCE, POSSIBLY CONTACT WITH CIRCUIT BREAKER LOCATED IN CENTER TUNNEL WHEN TENSION WAS RELEASED DURIING MAINTENANCE. PERSONNEL/MAINTENANCE ERROR.

HUGHES ALLSN SPAR CRACKED 06/18/2003
369D 250C20B 369D23623 HORIZONTAL STAB
(CAN) DURING 100 HOUR INSPECTION SMOKING RIVETS WERE OBSERVED ON THE BOTTOM CENTER DOUBLER OF THE HORIZONTAL STABILIZER.INVESTIGATION REVEALED SPAR CRACK IN WEB ANDLOWER FLANGE. HORIZONTAL STAB WAS REMOVED AND SENT OUT FOR SPAR REPLACEMENT..

HUGHES ALLSN ATTACH FITTING MISINSTALLED 06/28/2003
369E 250C20B 95K0300305 USELAGE
(CAN) EXTERNAL PLATFORM AND COUNTERWEIGHT INSTALLATION MODIFICATION OF STRUT ATTACH FITTING IS DAMAGING UPPER CORNER OF HELICOPTER ROOF STRUCTURE AND THUS REQUIRES INSTALLATION OF NEW HARDWARE P/N 95K0300-063/95K0300-065. REFERENCE IS LSTC,, O-LSH 0-095 WHICH WILL BE REVISED TO ISSUE 3.

PIPER LYC BRACE CRACKED 05/13/2003
PA2815 O320* 6524500 HORIZONTAL STAB
(AUS) HORIZONTAL STABILIZER TRIM DIAGONAL BRACE CRACKED. SUSPECT BRACE WAS BENT OUT OF THE WAY FOR ACCESS. STABILIZER HINGE BOLTS HAD MISSING SPACER WASHERS. PERSONNEL/MAINTENANCE ERROR.

PIPER LYC ATTACH FITTING BROKEN 05/02/2003
PA30 IO320B1A 2176000 MLG
(CAN) GEAR WOULD NO EXTEND WHEN SELECTED DOWN. EMERGENCY GEAR EXTENSION CARRIED OUT. LUG P/N 21760-00 WAS FOUND BROKEN. THIS RESULTED IN JAMMING OF THE RETRACTION MECHANISM. THIS PART SHOULD BE INSPECTED FOR CRACKS AT INSPECTION. ALSO ATTENNTION SHOULD BE PAID TO THIS AREA AFTER HARD LANDINGS, GEAR UP LANDING OR ANY TIME THE GEAR HAS BEEN EXTENDED ABOVE ANY EXTENSION AIRSPEED.

PIPER LYC SOLENOID LEAKING 02/27/2003 257
PA31 TIO540* A23D047.5 FUEL SYSTEM
PILOT REPORTED A FUEL ODOR IN THE COCKPIT ON PREFLIGHT INSPECTION. MAINTENANCE INSPECTED THE COCKPIT AND COMBUSTION HEATER AREA IN THE RIGHT SIDE OF THE NOSE SECTION AND FOUND THE HEATER FUEL SHUT OFF SOLENOID LEAKING FUEL FROM THE CASSE HOUSING.

PIPER LYC BOLT FAILED 05/29/2003
PA31 TIO540A2B PROPELLER
(CAN) DURING LAST THREE PROPELLER OVERHAULS THESE BOLTS ARE REPLACED WITH NEW AS REQUIRED. THE LAST TWO INSTALLS WERE NOT IN COMPLIANCE WITH SL 508. THESE WERE ONLY BY CHANCE NOTICED BY THE MAINTENANCE CO-ORDINATOR (NOT AME). THE PREVIOUS OONE WAS NOT NOTICED AND WAS RELEASED FOR SERVICE AND DESTROYED THE PROP SPINNER. THIS IS 100 PERCENT RECURRING FOR US. THE SPINNER IS NOT NORMALLY INSTALLED BY PROPELLER OVERHAUL COMPANY. RECOMMENDED AT THE NEXT 100 HOUR INSPECTION.

PIPER LYC BLADE CORRODED 05/22/2003
PA31 TIO540A2B FC84754 PROPELLER
(CAN) PROPELLER RECEIVED ON 22 MAY 2003, MODEL HC-E2YK-2B/FC847504 REMOVED FOR INSPECTION DUE TO EXCESSIVE ROTATIONAL BLADE MOVEMENT. A DECISION WAS MADE TO OVERHAUL THE PROPELLER. VISUAL INSPECTION ON ONE BLADE REVEALED EXCESSIVE CORROSIONN AT THE BLADE BEARING AREA. BLADE KNOB OF BLADE WAS WORN BEYOND LIMITS, BEARINGS CORRODED, PITCH CHANGE FORK AND BLOCKS WORN. ALL OTHER PARTS SUCH AS HUB ASSEMBLY, CYLINDER, PISTON, ETC. FOUND TO BE IN NORMAL CONDITION. BLADE FAILURE MOST LIKELY WOULD HAVE OCCURRED IN THE NEAR FUTURE DUE TO BLADE KNOB FAILURE OR CORROSION ON BLADE SHANK

PIPER LYC TRANSMITTER FAILED 06/25/2003
PA3811 O235L2C 486439 FUEL PRESSURE
(CAN) DURING FLT, PILOT NOTICED THE FUEL PRESSURE INDICATION DROP TO ZERO, WITHOUT ANY CHANGE IN ENGINE FUNCTION. THE PILOT CUT SHORT HIS LOCAL FLT, & RETURNED TO THE AIRPORT. THE FUEL PRESSURETRANSDUCER WAS REPLACED WITH ANOTHER NEW TRAANSDUCER, AND THE PRESSURE INDICATION RETURNED TO NORMAL. FURTHER TO THIS, THESE TRANSDUCERS ARE FAILING AT AN ALARMING RATE.EVEN A DISTRIBUTOR OF THESE P RODUCTS ADMITS THAT THEY ARE A DISPOSABLE ITEM.
PIPER PWA DOOR BUCKLED 07/02/2003 12400
PA42 PT6A41 WING LOCKER
(CAN) ON DESCENT AT 8500 FT THE LT WING LOCKER DOOR BUCKLED UP IN THE MIDDLE APPROXIMATELY 4-5 INCHES THEN CAME LOOSE FROM THE DOOR PIN AND POPPED OPEN AND STARTED FLAPPING. AIRCRAFT SPEED WAS REDUCED TO 140 KTS AND AIRCRAFT LANDING WAS UNEEVENTFUL.IT WAS DETERMINED THAT THE WING LOCKER WAS PRESSURIZING IN FLIGHT AND WAS INCREASED ON THE DESCENT BY SPEED. IT WAS FOUND THAT THERE WERE SOME HOLES IN THE FORWARD END OF THE LOCKER AND SEALEANT ON THE LOCKER SKIN SEAMES HAD DETERIORATED AND FALLEN OUT ALLOWING HIGH PRESSURE AIR FROM THE FLAP WELL TO ENTER THE LOCKER AREA. THE HOLES WERE PLUGGED AND SEAMS RESEALED AND THE LOCKER WAS PRESSURE CHECKED FOR LEAKAGE AND FOUND
SNIAS TMECA EVAPORATOR BROKEN 09/06/2002
AS350B ARRIEL1D1 900A4031 ZONE 100
CRACKED HOUSINGS THAT CAUSE BLOWER MOTORS TO BECOME DISLODGED IN THE HOUSING, CAUSING BLOWER CAGES TO RUB ON THE HOUSING AND HOUSINGS TO BREAK APART. EVENTUAL FAILURE OF ENTIRE ASSEMBLY AND BLOWER MOTOR RENDERING THE AIRCONDITIONING SYSTEMM INOPERATIVE. ONE OF HOUSING PARTS OR BLOWER CAGE PIECES COULD FALL OFF AND BECOME LODGED IN LT TAIL ROTOR CONTROL PEDDLES. THIS IS POSSIBLE DUE TO LOCATION OF EVAPORATOR ASSY, IT IS ALMOST DIRECTLY OVER TAIL ROTOR CONTROL PEDDLES ON L/H SIDE OF COCKPIT. THIS HAS TO BE PAID EVERYTIME ONE BREAKS BECAUSE UNITS ARE NOT FIELD REPAIRABLE, THEY HAVE TO BE RETURNED TO MANUFACTURER FOR REPAIR OR REPLACEMENT. WE WOULD LIKE TO RECOMEND THAT EVAPORATOR ASSY.
SNIAS TMECA IGNITER BROKEN 06/10/2003
AS350B ARRIEL1D1 9550175400 ENGINE
(CAN) ON INSPECTION IT WAS DISCOVERED THE INSULATOR HAD BROKEN FREE AND HAD SLID DOWN THE CENTER ELECTRODE ABOUT .3750. COULD POSSIBLY HAVE GONE THROUGH THE GAS PATH OF THE ENGINE HAD IT NOT BEEN DISCOVERED.
SNIAS LYC FUEL CONTROL FAILED 05/19/2003
AS350D LTS101600A3 430128807 ENGINE
(CAN) NO FUEL COMING OUT THE FUEL CONTROL UNIT. IT HAPPENED ON THE FIRST START ATTEMPT, IN THE MORNING. INTERNAL FAILURE OF FCU SUSPECTED, SINCE ALL FUEL LINES HAVE BEEN BLED FROM AIR. PREVIOUS FLIGHTS HAD NOT REVEALED ANY FLUCTUATIONS OR PPARAMETERS PROBLEMS. FCU HAS BEEN REPLACED ON 22 MAY 2003. AND STARTS WERE AS NORMAL AS IT SHOULD. THEN, INTERNAL FCU FAILURE WILL HAVE TO BE INVESTIGATED BY THE OVERHAUL FACILITY OR MANUFACTURER.
SWRNGN GARRTT RECEPTACLE CRACKED 06/18/2003 23728
SA226T TPE33110UA 27200637 OOR FRAME
(CAN) WHILE CARRYING OUT SERVICE LETTER 226-SL-027, WHICH CALLS FOR INSPECTION OF THE ALL DOOR LATCH RECEPTICLES, WE FOUND 3 CRACKED ON THE PASSENGER DOOR FRAME AND 2 CRACKED ON THE AFT CARGO DOOR FRAME. ONE RECEPTICAL WAS CRACKED ALMOST INN HALF WHILE OTHERS SMALL AND DIFFICULT TO SEE. THE ECCENTRIC BUSHING WHICH MOUNTS IN THE RECEPTICAL MUST BE REMOVED TO SEE THE CRACKS. CRACKED RECEPTICLES WERE DISCOVERED IN ANOTHER METRO II IN THE FLEET THIS SERVICE LETTER IS NOT MANDATORY.
SWRNGN GARRTT WOODWARD SPLINE FAILED 07/07/2003
SA226T TPE33110UA FUEL CONTROL
(CAN) CREW STARTED ENG & NOTICED ENG WAS SLOW TO ACCELERATE TO IDLE. ONCE AT IDLE (70 PERCENT) ENGINE SLOWLY INCREASED TO APPROXIMATLY 80 PERCENT WITHOUT INPUT FROM CREW. IN AN ATTEMPT TO REDUCE ENG POWER, WAS NO RESPONSE TO ENG CONTROL INPPUTS BY CREW. ENG SHUTDOWN & MAINT CONTACTED. UPON INSP BY MAINT, FCU DRIVE FOUND SEIZED & SHAFT SHEARED OFF. FCU REPLACED & ENG FUNCTION NORMAL DURING ENG RUN. UPON REASEARCHING RECORDS ON THIS FCU, IT WAS DETERMINED THAT THIS FCU WAS REPAIRED SEVERAL TIMES SINCE OVERHAUL. OVERHAUL WAS COMPLETED JULY 7, 2000 & REMOVED FOR REPAIR JANUARY 15, 2002 AT 1418.8 HRS TSO & THEN AGAIN ON OCTOBER 31, 2002 AT 2168.3 HRS TSO. FAILURE OF THIS FCU OCCURED 141 HRS SINCE THE LAST REPAIR. ABORTED TAKEOFF. RETURNED TO MAINTENANCE FACILITY.
SWRNGN GARRTT NOZZLE BLOCKED 01/21/2003
SA227A TPE33111U 3103235 ENGINE 200
(AUS) ENGINE FUEL NOZZLES PARTIALLY BLOCKED.
UNIVAR CONT RIB CORRODED 06/10/2003
415C C8512F 13017R WING
AD 2002-26-02 ADMENDMENT 39-12987, MFG SERVICE BULLETIN NR 31. METHOD 1, INSPECTION HOLES IN WING CENTER SECTION. INSPECTED FRONT AND REAR SPARS...NO EVIDENCE OF CORROSION. DISCOVERED CORRODED RIB, RIGHT SIDE TRAILING EDGE WING WALK BOX. RREMOVED AND REPLACED RIB WITH NEW MANUFACTURED. CLEANED LIGHT CORROSION FROM TRAILING EDGE WING WALK OUTER SKINS, TREATED AREA WITH ZINC CHROMATE. TREATED WING CENTER SECTION WITH CORROSION INHIBITOR.
UROCOP TMECA STRAP DAMAGED 05/21/2003 1000
EC120B ARRIUS2B1 C642A0402101 TAIL ROTOR HEAD
TORSION STRAP ASSY IS USED IN THE TAIL ROTOR ASSY. FOUND DURING 500 HOUR INSPECTION/ DISASSEMBLED FOR INSPECTION. SCORING ON 2 STRAPS. FRETTING ON NUMEROUS STRAPS, SURFACE CORROSION. (ASSEMBLY REJECTED, NEW STRAP ASSEMBLY INSTALLED)
ZLIN LYC BAFFLE BROKEN 05/23/2003
Z242L AEIO360A1B6 MUFFLER
(CAN) DUE TO FINDING A BROKEN INTERNAL BAFFLE INSIDE THE NR 1 EXHAUST SILENCER, WE INITIATED AN INTERNAL INSPECTION OF THE SILENCER EVERY 100 HOUR INSPECTION INTERVAL. THIS BAFFLE WAS FOUND TO BE COMPLETELY BROKEN. THE EXHAUST SILENCER WASS REPLACED WITH A REPAIRED UNIT. IT IS BELIEVED THAT A BACKFIRE UPON STARTUP IS THE CAUSE OF THE BAFFLE DAMAGE AND HEATING AND COOLING OF THE EXHAUST SYSTEM. THE STUDENTS ARE REMINDED TO NOT OVER PRIME THE ENGINES AT START UP.
ZLIN LYC CABLE BROKEN 06/16/2003
Z242L AEIO360A1B6 Z4242390000 NLG STEERING
(CAN) WHILE TAXIING AN AIRCRAFT THE STUDENT PILOT NOTICED THAT THE NOSE WHEEL STEERING WAS NOT RESPONDING WITH TURNS TO THE RT. MAINTENANCE WAS NOTIFIED AND IT WAS FOUND THAT THE RT NOSE GEAR STEERING CABLE WAS BROKEN AT THE AFT END OF THEE CABLE WHERE THE ATTACH BOLT GOES THROUGH THE THIMBLE. THE CABLE WAS REPLACED AND THE AIRCRAFT RETURNED TO SERVICE. IF THE AIRCRAFT ISN'T ROLLING WHEN NOSE WHEELSTEERING IS ACTIVATED IT PUTS STRESS ON THE NOSE WHEEL STEERING SYSTEM. THIS SYSTEM DOES

OMB No. 2120-0003

DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

MALFUNCTION OR DEFECT REPORT

OPER. Control No.	
ATA Code	
1. A/C Reg. No.	N-

Enter pertinent data	MANUFACTURER	MODEL/SERIES	SERIAL NUMBER
2. AIRCRAFT			
3. POWERPLANT			
4. PROPELLER			

5. SPECIFIC PART *(of component)* CAUSING TROUBLE

Part Name	MFG. Model or Part No.	Serial No.	Part/Defect Location.

6. APPLIANCE/COMPONENT *(Assembly that includes part)*

Comp/Appl Name	Manufacturer	Model or Part No.	Serial Number

Part TT	Part TSO	Part Condition	7. Date Sub.

8. Comments *(Describe the malfunction or defect and the circumstances under which it occurred. State probable cause and recommendations to prevent recurrence.)*

Optional Information:

Check a box below, if this report is related to an aircraft

☐ Accident; Date _____ ☐ Incident; Date _____

DISTRICT OFFICE | OPERATOR DESIGNATOR

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SUBMITTED BY:

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